

KOPYTOV, V. D.

SKORYY, I.A.; KOPYTOV, V.D.

In the Department of Mechanics and Mathematics. Vest.Mosk.un. 9 no.6:
143-145 Je '54.
(Mechanics) (Mathematics)

(MLRA 7:8)

16(1)

AUTHORS:

Skoryy, I.A., University Lecturer, and SOV/55-58-2-33/35
Kopytov, V.D., Scientific Assistant

TITLE:

Lomonosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University (Lomonosovskiye chteniya 1957 goda na mekhaniko-matematicheskem fakul'tete MGU)

PERIODICAL:

Vestnik Moskovskogo Universitety. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958 /3, Nr 2, pp 241-246 (USSR)

ABSTRACT:

The Lomonosov lectures 1957 took place from October 17 - October 31, 1957 and were dedicated the 40-th anniversary of the October revolution. In the general meeting A.N. Kolmogorov, Academician spoke "On Approximative Representation of Functions of Several Variables by Superposition of Functions With Less Variables and ϵ -Entropy of Classes of Function". The lecture generalizes the results of Kolmogorov, A.G. Vitushkin, V.I. Arnol'd and V.M. Tikhomirov. The contents has been already published (Doklady Akademii nauk SSSR, 114, 5). Professor Kh.A. Rakhmatulin, Member of the Academy of Sciences of the Uz SSR, spoke on

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Lomonosov - Lectures 1957 at the Mechanical-
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"Investigation of the Boundary Layer of the Motion of a two-
Component Liquid".

The other lectures were given separately in the sections
mechanics and mathematics. The following lectures were given.

1. Professor L.N. Sretenskiy, Corresponding Member, AS USSR : Propagation of Sound Waves From a Rotating Deformed Ball.
2. Professor G.G. Chirayev : The Flow Around Thin Truncated Bodies by Gas With High Supersonic Velocity.
3. Professor S.N. Nikiforov : Properties of the Calculation, Construction and Structure of Hydrotechnical Dikes on the Rivers of the Central Strip of the USSR.
4. Professor A.Ya. Sagomonyan : Penetration of a Rigid Body into the Ground.
5. M.Z. Litvinov-Sedoy, Senior Scientific Assistant : On the Synthesis of Control Circuits With Bounded Interval of Variation of the Controlled Variable.
6. V.A. Lomakin, Candidate of Physical-Mathematical Sciences : Scalar Plastic Metal Properties Under Variations of Structure.
7. Professor N.A. Slezkin : On Some Questions of the Flow Around Porous Walls.

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8. A.L. Pavlenko, Lecturer : Generalization of the Theory of the Transverse Shock Against a Flexible Thread.
9. A.G. Kulikovskiy, Aspirant : Flow Around Magnetized Bodies by Conducting Liquid.
10. N.V. Yeremeyev, Lecturer : Instruments for the Analysis and Synthesis of Mechanisms.
11. V.S. Lenskiy, Lecturer : Some General Laws in the Behavior of Multiply Loaded Metals.
12. V.D. Klyushnikov, Aspirant : A Variant of the Theory of the Increases of Deformation and Elasto-Plastic Stability.
13. Professor M.I. Vishik and Professor L.A. Lyusternik : Asymptotic Behavior of the Solutions of Linear Equations With Small Parameter in the Derivatives.
14. Professor O.A. Oleynik : Some Non-Linear Partial Differential Equations (Survey of the Results of T.D. Ventsel', Chzhou Yuy-lin', N.D. Vvedenskaya, A.S. Kalashnikov, Ye.S. Sabinen, S.L. Kamenomostskaya).
15. Professor M.R. Shura-Bura and P.N. Trifonov, Senior Scientific Assistant : Automatization and Programming.

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Lomonosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University

SOV/55-58-2-33/35

16. A.D. Gorbunov, Lecturer and B.M. Budak, Lecturer : Difference Methods for the Solution of Hyperbolic Equations.
17. N.S. Bakhvalov : Number of Calculation Operations for the Solution of Elliptic Equations.
18. V.I. Lebedev, Aspirant : Difference Method for the Solution of the Sobolev-System.
19. Professor Ye.B. Dynkin : Markov Processes and Semigroups.
20. A.G. Kostyuchenko, Candidate of Physical-Mathematical Sciences : Decomposition of Differential Operators With Respect to Generalized Eigenfunctions.
21. F.A. Berezin, Candidate of Physical-Mathematical Sciences; Foundations of the Theory of Spherical Harmonics on Manifolds.
22. V.M. Borok, Aspirant : General Properties of Partial Evolution Systems.
23. V.A. Uspenskiy, Candidate of Physical-Mathematical Sciences : On Constructive Mathematical Analysis.
24. P.L. Ul'yanov, Lecturer : Reversal of Terms in Trigonometric Series.

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Lomonosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University

SOV/55-58-2-33/35

25. I.G. Petrovskiy, Academician and Ye.M. Landis, Senior Scientific Assistant : On the Number of Boundary Cycles of a Differential Equation of First Order With a Rational Right Side.
The contents of all the lectures have already been published.

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S/055/60/000/03/07/010

AUTHORS: Dobrovolskiy, I.P., Kopytov, V.D., and
Lyu Guannin

TITLE: Analysis of Contact Pressures of Thick Stamp Plates of a Heavy
Stamping Press [4]

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya I, matematika,
mekhanika, 1960, No. 3, pp. 60-66

TEXT: By models of a transparent optically active material the contact pressures of thick stamp plates were determined experimentally. The experimental results were compared with the results of approximate computing methods. Since the calculations were made under very rough assumptions of approximation, there is only a partial agreement between the experiment and the approximate calculation. Nevertheless the author is of opinion that the usefulness of the approximate methods (Ref. 2, 3, 4, 5) is confirmed by the experiments.

There are 7 figures, 3 tables and 5 Soviet references.

ASSOCIATION: Kafedra teorii uprugosti (Department of Theory of Elasticity)

SUBMITTED: September 9, 1959

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83689

15.810 also 2209

8/032/60/026/009/014/018
B015/B058AUTHORS: Shchegolevskaya, N. A., Morozov, B. A., Skoryy, I. A.,
Kopytov, V. D., Sokolov, S. I.TITLE: The Use of Epoxy Resin^b of the Type Epoxy-CHS-2200 for
the Polarization-optical Method

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 9, p. 1149

TEXT: An optically active synthetic resin was obtained by using the Czechoslovakian epoxy resin of the type Epoxy-CHS-2200 with phthalic anhydride as hardener. The resin mentioned differs from the much used epoxy resins of the type 340 (E40) and 3A6 (ED6) by having a lower viscosity, and a homogeneous mass being nevertheless obtained with phthalic anhydride. The molten anhydride (40 g) is added to the epoxy resin (100 g) heated to 120°C, the mass is carefully mixed, poured into pre-heated molds, and left in the thermostat for 24 hrs at 100°C and then for 21 hrs at 120°C. The properties of the resin are tabulated. There are 1 table and 1 Soviet reference. X

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S/110/61/000/002/002/009
E194/E455

AUTHORS: Dobrovolskiy, I.P., Engineer,
Kartashkin, B.A., Engineer, Kopytev, V.D., Engineer,
Skoryy, I.A., Candidate of Physical and Mathematical
Sciences

TITLE: An Investigation by the Photo-Elasticity Method of the
Stresses in the Assemblies Used to Fix the Active Steel
in Hydro-Alternators

PERIODICAL: Vestnik elektropromyshlennosti, 1961, No.2, pp.8-13

TEXT: The assemblies used to secure the stator cores in hydro-alternators sometimes fail, principally near the welds. The assembly is loaded by the radial magnetic attraction of the poles and by tangential forces due to electromagnetic torque. The ratio of these loadings is different under different conditions and as yet sufficiently reliable methods of determining them do not exist. These loadings and the places of highest stress are usually determined by full-scale tests on assemblies, using strain gauges. The location of the strain gauges is selected arbitrarily. For accurate design it is necessary to determine separately the stresses due to the axial and radial loading so as to assess their
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An Investigation by the Photo-Elasticity Method ...

combined action. Then when full-scale tests are made, the strain gauges can be placed at the most significant points. It is also important to determine the stress distribution in the thickness of the rings that support the keying ribs. Stress changes resulting from alterations in the rigidity of the joints are also important. It is not possible to study all these problems by means of full-scale tests. Accordingly, tests were made by the photo-elasticity method, using transparent models in polarized light. This method is effective for determining the stress distribution over the whole range and, moreover, no initial stresses are introduced in the manufacture of the models which could distort the results. The principles of the photo-elastic methods of stress determination are briefly explained. It is noted that, if the models are heated under load to a temperature of 100 to 150°C and then slowly cooled under load to room temperature, the stress condition may be retained in the model and is not altered when it is sectioned. By this means, the sections may be studied to determine the stress distribution throughout the body of the model. This method was used in making

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the study. Fig.1 shows a model of a fixing assembly consisting of a support ring 1 which is fixed to the stator frame of the alternator, a block 2 welded to the ring and a keying rib 3 welded to the block. In an actual machine there are several rings but, to avoid difficulties in modelling, only an individual assembly was studied. The model was made on a scale of 1/5. To study the influence of assembly rigidity, three methods of fixing were used. In the first, the ring and keying rib were made in one solid piece; in the second and third, the assemblies were made of separate parts stuck together to imitate welds of different kinds. Each of the models was tested under radial and tangential loading applied mechanically; stresses were determined at four sections. Curves of equal slope of main stresses (isoclines) and trajectory of main stresses (isostats) were constructed. The differences in the principal stresses were determined along the selected sections: by integration of the equilibrium equation, the detailed stress distribution was determined. With radial loading, stress concentrations were observed in sections of the ring close to the

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keying rib in the region between the welded joints. As the distance from the wedge increases, the distribution of stress over the ring thickness becomes more uniform. With tangential loading the stress distribution did not depend much on the method of constructing the model. Stress peaks are observed in places near the side faces of the block. Here, all three stresses are considerable and should be allowed for in assessments of strength. The results obtained by the photo-elasticity methods were compared with strain gauge test results on radially-loaded models fabricated in metal and annealed before test to remove remanent stresses. The stress distributions obtained by the two methods were compared. By the photo-elasticity method, the conditions of equilibrium are fulfilled to within 6 to 7%, whereas the tests on metal models in the corresponding sections indicate that the conditions of equilibrium are fulfilled to within 40%. The difference is due to bending of the rings that occurs in the tests on the metal models. Because of the test conditions, most of the strain gauges are fixed to one side of the ring. A few gauges

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fixed on the other side demonstrated the presence of bending, which altered the stress distribution by 20 to 30% as compared with uniform distribution throughout the thickness. Because of the small number of strain gauges on the lower side, it was not possible to make allowance for bending when the results were worked out. It should be noted that when stresses are determined on a transparent model, the method is such that the measured stresses are averaged out over the thickness of the ring and the results are not affected by bending. It is possible to calculate the stress distribution for the case of radial loading; experimental and calculated values are compared; there are certain differences for which an explanation is offered. On consideration of the general picture of stress distribution under the influence of radial and tangential loads, as determined by the photo-elasticity method, certain recommendations may be made for full-scale testing. If the strain gauges are fixed on the axis of symmetry of the block, where the stresses are only due to the action of radial forces, the magnitude of the radial force may

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An Investigation by the Photo-Elasticity Method ...

readily be calculated. With this knowledge, it is possible to calculate the stresses due to radial loading in the ring on both sides of the axis of symmetry of the block. Then, if strain gauges are fitted in these places, it is possible to obtain the stress distribution due to tangential loading by subtracting from the total stress the stress due to radial loading. Here, it is of considerable assistance to note that the stress distribution due to tangential loading is obliquely symmetrical. Hence, by adding together the indications of two symmetrically-located strain gauges, its effect may be neutralized and the stress due to the radial force may be determined more accurately. Strain gauges for measuring stress should be fixed to the ring at a distance from the block of not less than 1.5 times the thickness of the ring. At this distance, the influence of irregularities in the stress distribution within the thickness of the ring will be without effect. It is also advisable to fix check strain gauges on the opposite side of the ring, to exclude errors that may be introduced by bending. The tests by the photo-elasticity

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method were made by the Laboratoriya opticheskogo metoda issledovaniya napryazheniy (Laboratory for the Optical Method Research of Stresses) NGU jointly with the section for dynamic research of Laboratoriya elektricheskikh mashin (Laboratory for Electrical Machinery) VNIIE, and those by the strain gauge method by the above named laboratory of VNIIE at the Institut elektrosvarki imeni O.Ye.Patona (Electric Welding Institute imeni O.Ye.Paton). There are 11 figures.

SUBMITTED: March 17, 1960

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"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

DOBROVOL'SKIY, I.P., inzh.; KARTASHKIN, B.A., inzh.; KOPYTOV, V.D., inzh.;
SKORYY, I.A., kand.fiziko-matematicheskikh nauk

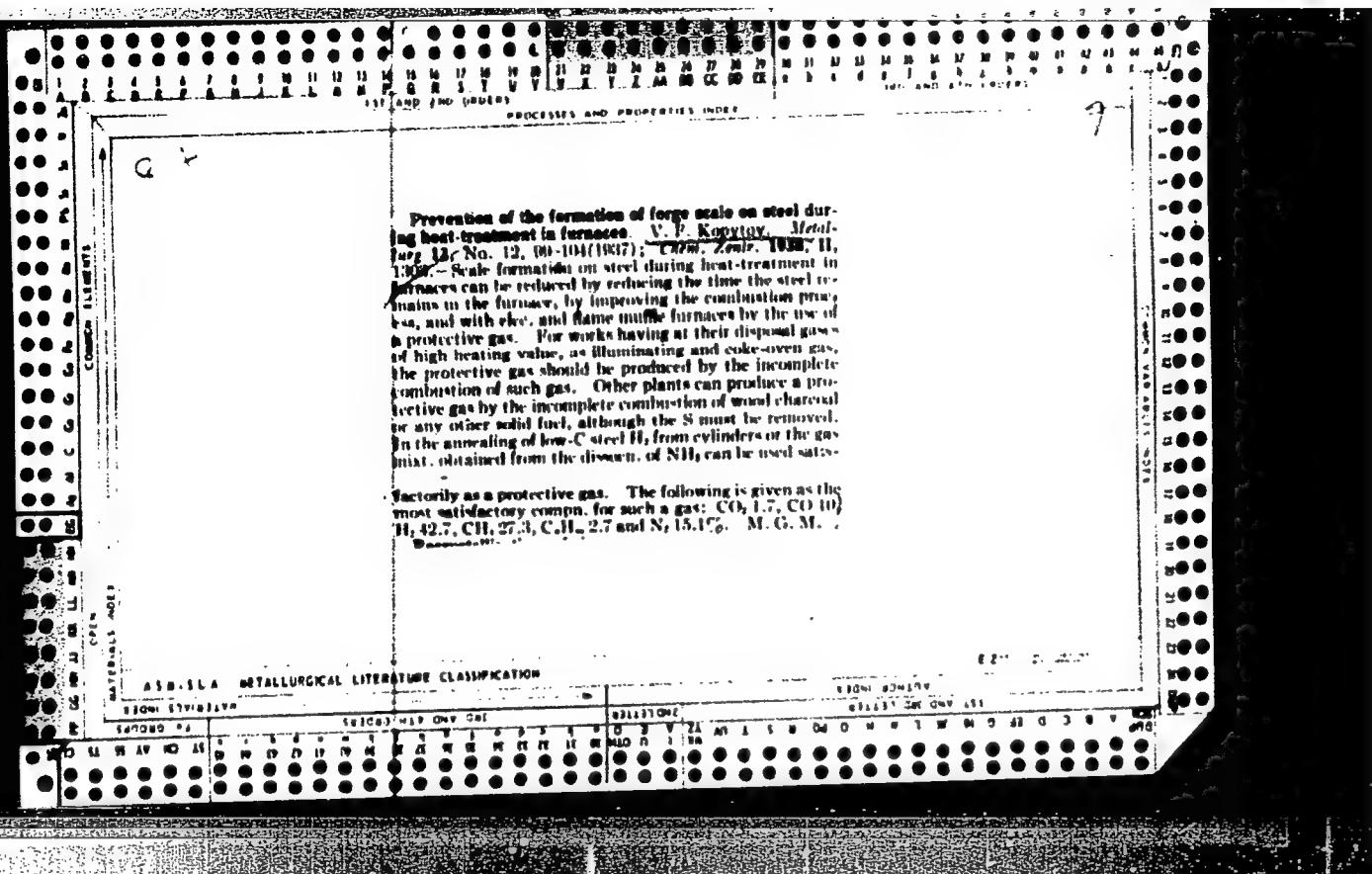
Use of the photoelectric method for studying the stresses in the
active steel joints of hydrogenerators. Vest.elektroprom. 32
no.2:8-13 F '61. (MIRA 15:5)
(Turbogenerators) (Photoelasticity)

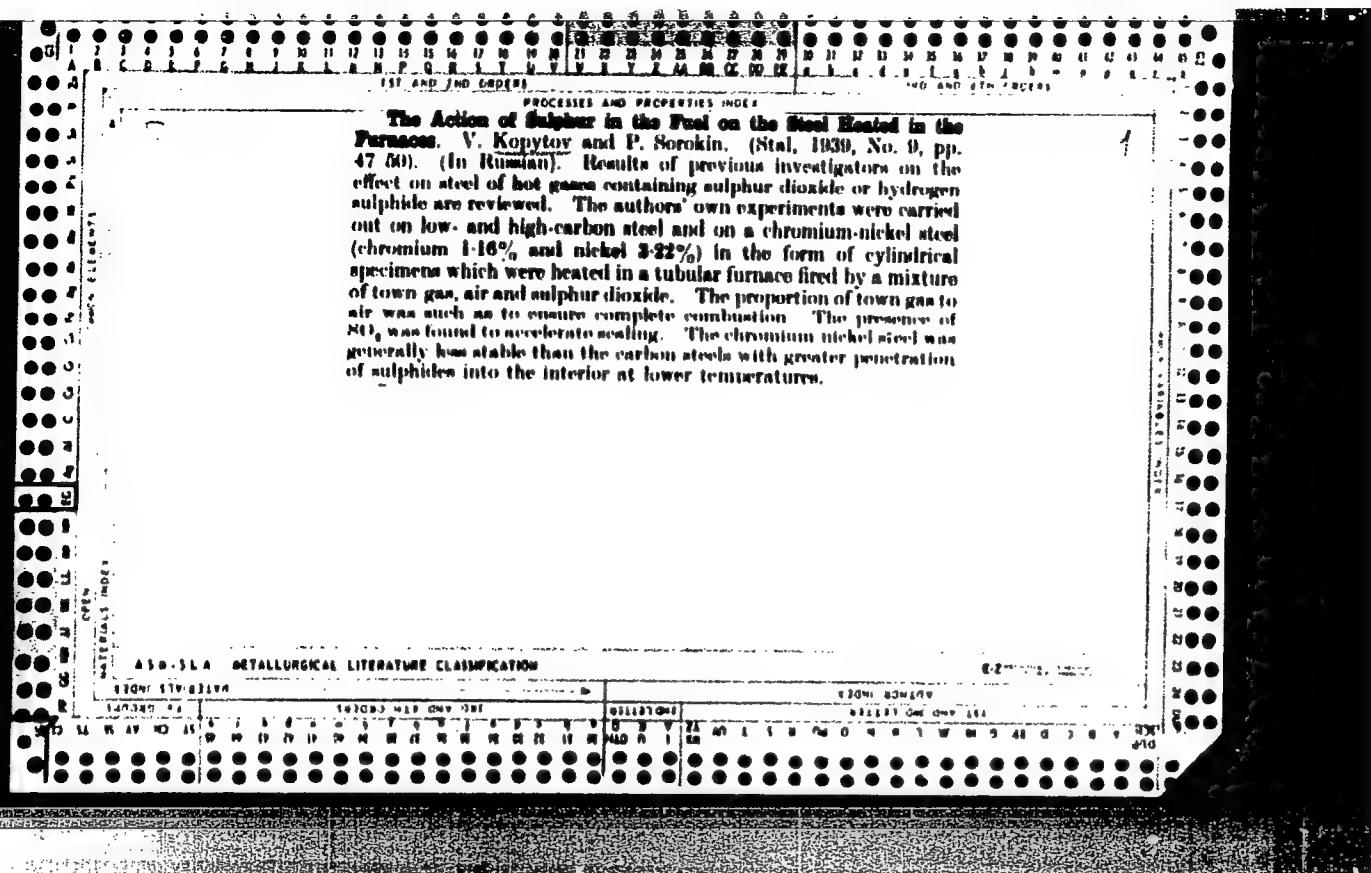
APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

DOBROVOL'SKIY, I.P. (Moskva); KOPYTOV, V.D. (Moskva)

Determining contact pressures on three-dimensional models. Inzh.
zhur. 1 no.4:172-174 '61. (MIRA 15:4)
(Strains and stresses)





"APPROVED FOR RELEASE: 03/13/2001

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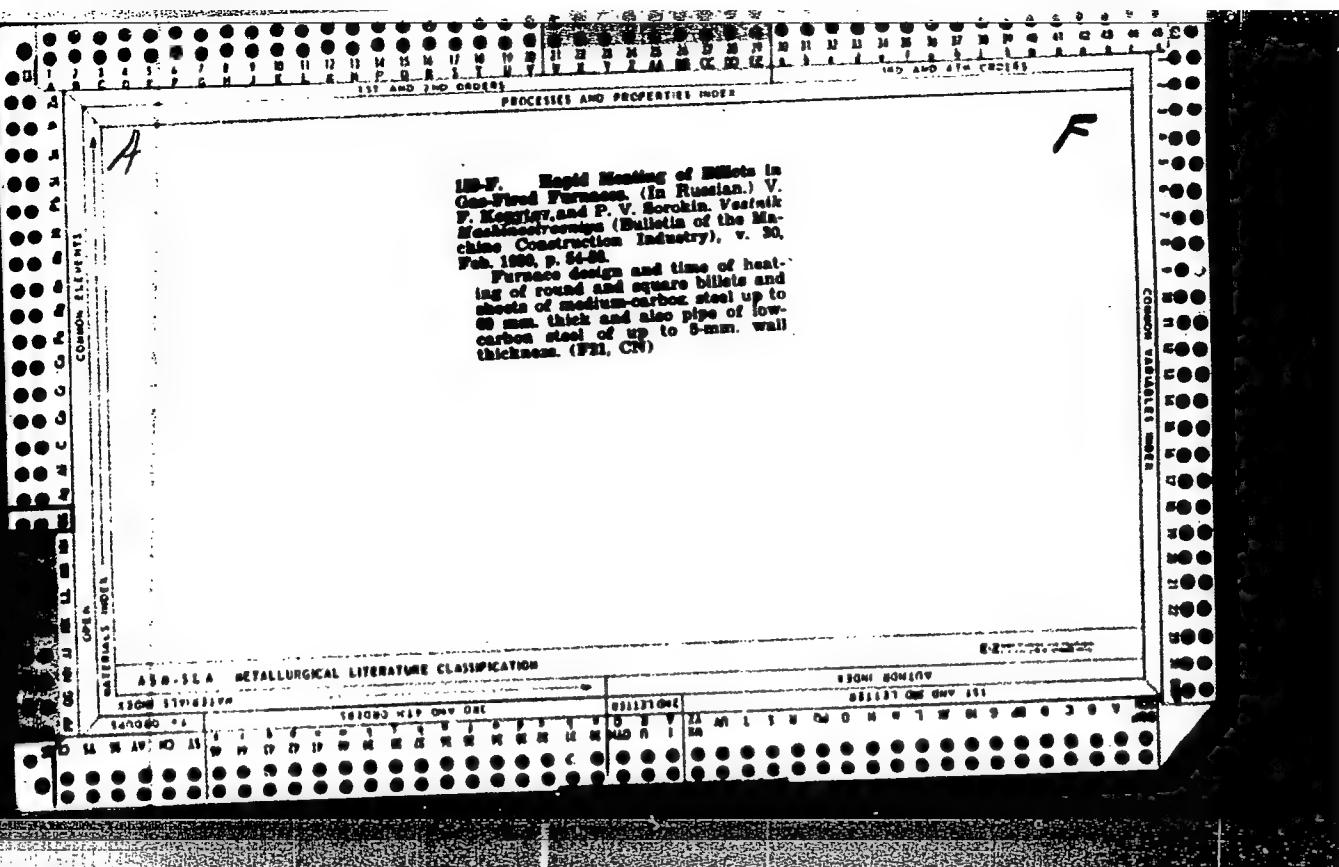
KOPYTOV, V.P., kandidat tekhnicheskikh nauk.

Steel annealing without oxidization. [Trudy] TSNIITMASH 7:3-142 '47.
(MIRA 7:5)

(Steel--Heat treatment)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"



KOPTTOV, V.P., kandidat tekhnicheskikh nauk; SOROKIN, P.V.; POPOVA, S.M.,
tekhnicheskiy redaktor.

[Rapid heating of steel] Skorostnoi nagrev stali. Moskva, Gos.
nauchno-tekhn.issd-vo mashinostroitel'noi lit-ry, 1952.21 p.
(Nauchno-tehnicheskaya informatsiya) [Microfilm] (MIRA 9:4)
(Steel--Heat treatment)

KOPYTOV, V. F.

Kopytov, V. F. -- "Investigation of the Tempering of Steel in Furnaces."
Dr Tech Sci, Inst of Ferrous Metallurgy, Acad Sci Ukrainian SSR, Kiev
1953. (Referativnyy Zhurnal--Khimiya, No 1, Jan 54)

So: SUM 168, 22 July 1954

KOPY TOV, V.F.

Korffow, W. F. "Mechanisierte Schmiedestuben" 4vo.
pp. 87. Illustrated. Berlin, 1963. Verlag Technik.
(Price DM. 8.40)

Translation of Title: Mechanized
Forging Furnaces.

KOPYTOV, V.F.

Gas burner for room heaters

Soviet Source: "RABOTA I KONSTRUKTSIYA GAZOVYKH PECHEI" (Operation and Construction
of Gas Ovens), Academy of Sciences, Ukrainian SSR, 1953, p.40.

Klopfer

Fundamental calculation of some processes for antioxidation of steel. V. E. Konytox. *Trudy Ind. Ispolzovaniya Chernih. Nauk Ukr. SSSR* 1953, 80-98; *Referat Zhur.* Chern. 1955, No. 4420 —An analysis of processes employed in the protection of protective films at the equilibria of such gases with air on the metal surface being protected, and diffusion phenomena under these conditions are analyzed.

M. Grossch

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KOPYTOV, V.P., kandidat tekhnicheskikh nauk.

Improving the performance of gas furnaces used in the machinery industry.
Trudy Inst.isp.gaza AN UBSR 1:69-79 '53. (MLRA 9:6)
(Furnaces, Heat-treating)

KOPYTOV, V. F.

USSR/Miscellaneous-----machine construction

Card 1/1

Authors : Kopytov, V. F., Cand. in Tech. Sci.; Kopitova, G. F., engineer;
and Sorokin, P. V.

Title : Decarbonizing steel in reverberatory furnaces

Periodical : Vest. mash. 34/3, 36-40, Mar/1954

Abstract : The products of burning fuel in a reverberatory furnace at high temperature oxidize steel, producing scales on it, and such oxidation causes oxidation of the carbon in the surface layer of the steel. When the decarbonizing of the surface layer is rapid the decarbonized layer is found under the scale after heating. In order to reduce decarbonization it is necessary during hot processing to heat the steel more rapidly. One Russian reference, dated 1949. Graphs.

Institution :

Submitted :

KOPYTOV, V.F.

USSR/Engineering—Hot working of steel

Card 1/1 : Pub. 128—13/33

Authors : Kopytov, V. F.

Title : Rapid heating of steel in automatic gas furnaces

Periodical : Vest. mash. 34/8, 50-51, Aug 1954

Abstract : The question of heating steel for forging work is dealt with and a method of speeding up the heating process is described with an explanation of the factors involved. A comparison is made between electric and gas furnaces. Drawings; graphs.

Institution :

Submitted :

DOBROKHOTOV, Nikolay Nikolayevich; KOPTTOV, V.Y., doktor tekhnicheskikh
nauk, redaktor; ZIL'BAN, M.S., redaktor; SIVACHENKO, Ye.K.
tekhnicheskiy redaktor

[Use of thermodynamics in the metallurgy] Primenenie termodi-
namiki v metallurgii. Kiev, Izd-vo Akad.nauk USSR, 1955. 73 p.
(Thermodynamics) (Metallurgy)

KOPYTOV, Viktor Filimonovich; KUROYEDOV, V.A., redaktor; VALOV, N.A., re-daktor; MIKHAYLOVA, V.V., tekhnicheskiy redaktor

[Heat-treatment of steel in furnaces] Nagrev stali v pechakh.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1955. 264 p. (MIRA 9:4)
(Steel--Heat treatment)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.F.

Using fuel in furnaces. Trudy Inst. isp.gaza AN URSR 3:61-66 '55.
(Furnaces) (Fuel) (MIRA 9:9)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

Kopytov, V. F.

Use of fuels in furnaces. V. F. Kopytov. *Vestnik Meshinostroyeniya* 33, No. 7, 60 (1955).—Natural, coke-oven, water, blast-furnace gases, producer gas made of coal and of anthracite, coal, and pulverized coal were compared in their heating efficiency and cost with oil residues. The results, given mostly in graphs, are supplemented with general comments. D. Gaf.

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.P.; KHANDOGA, T.P.

First session of special working group on gas problems at the
European Economic Commission of the UNO. Gas.prom.no.12:39 D'56.
(MLRA 10:1)

(Europe--Gas manufacture and works)
(United Nations--Commissions)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

137-58-6-11425

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 26 (USSR)

AUTHOR: Kopytov, V.F.

TITLE: Improving the Operation of Furnaces at Plants in the Machinery Industry (Uluchsheniye raboty pechey mashinostroitel'nykh zavodov)

PERIODICAL: V sb.: Progressiv. metody shtampovki i kovki. Khar'kov, Oblizdat, 1957, pp 129-133

ABSTRACT: A brief examination is made of the conditions for improving the operation of heating furnaces at plants in the machinery industry: the use of gas and heavy oil as fuel, high rates of heating (as fast as 1-2 min per cm thickness) of steel parts, the use of fast-heating furnaces, local heating of parts by various types of burners, shielded-atmosphere non-oxidizing heating, fuel economy by use of recuperators and of steam boilers and water heaters.

G.G.

1. Furnaces--Operation 2. Furnaces--Applications 3. Furnaces--Design
4. Furnaces--Equipment

Card 1/1

AUTHOR: Kopytov, V.F.

122-3-21/30

TITLE: New Methods of Gas Heating (Novyye metody gazovogo nagreva)

PERIODICAL: Vestnik Mashinostroyeniya, 1957, No.3, pp. 53 - 57
(USSR).

ABSTRACT: High-speed methods of gas-heating are now available which approach in speed and compactness those of the induction heating. Increased furnace temperatures and higher speeds of the hot gas are the chief methods of increasing the rate of heating, but local heating and infra-red heating are mentioned. Methods of maintaining precise flame dimensions are discussed. High calorific value gas such as natural, coke-oven gas or butane mixtures yield very hot flames when the correct air mixture is maintained, even without the use of oxygen. Mixing machines including one made by the Moscow Motor Plant (Moskovskiy Avtozavod) imeni Likhacheva are shown. A membrane actuated air valve maintains the ratio of gas and air by responding to the flow of the mixture. The output pressures are between 700 and 2 000 mm water gauge, such high pressures being necessary because in burning gas/air mixtures of the correct ratio, the flame propagates with high velocity. To avoid the rupture of the flame a sparking plug is used in the burner. Standard Cardl/3 burners and burners formed in accordance with the component are

New Methods of Gas Heating.

122-3-21/30

used. Examples are given of burners with a small round nozzle like welding burners and burners with an angular nozzle, covered with a ceramic or a metallic grid for moderate speeds. Ceramic burners of the semi-closed type are used for thin-walled components requiring indirect heat. Cup-formed burners are illustrated and the provision of ribs inside the cup for producing turbulence in a slow-burning gas such as natural gas. G.S. Dobrovolskiy tested a heating canopy device at the Gas Utilisation Institute (Institut Ispol'zovaniya Gaza). A number of ceramic plates with a large number of holes of 1.25 mm diameter are situated at the top and direct the flame on to the component. Other examples of mainly indirect radiation heating are given; local heating is also accomplished by burners of the closed type which constitute small combustion chambers (heat release density up to 400 million kcal/m³hr). A temperature of up to 1 600 °C and a speed of 300 m/sec have been achieved and a special burner for crankpins is illustrated. Infra-red heating and infra-red drying are briefly surveyed.

Card 2/3 There are 10 figures (including 1 graph).

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001

New Methods of Gas Heating.

122-3-21/30

ASSOCIATION: Gas Utilisation Institute of the Ukrainian Ac.Sc. SSR.
(Institut Ispol'zovaniya Gaza Ak.Nauk. Ukr.SSR)

AVAILABLE: Library of Congress

Card 3/3

KHMARA, S.M., kand.tekhn.nauk, dotsent, otd.red.; KOPYTOV, V.F., otd. red.; VESSEL'MAN, S.G., prof., otd.red.; DONSKOY, Ya.Ye., red.; ZAMAKHOVSKIY, L.S., tekhn.red.

[Conversion of industrial furnaces and boiler installations to natural gas] Perevod promyshlennykh pechей i kotel'nykh ustanovok na prirodnyi gaz. Khar'kov, Khar'kovskoe obl.izd-vo, 1958. 233 p.
(MIRA 13:1)

1. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Khar'kovskoye oblastnoye pravleniye. 2. Chlen-korrespondent AN USSR (for Kopytov).
(Furnaces)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

HOPYTOV, V. F.

"Firing of Furnaces in Mechanical Plants by Natural Gas,"
paper submitted for the 1st National Congress, Czechoslovak Scientific Technical
Society for Fuel Utilization, Karlovy Vary. Czechoslovakia, 12-17 May 58.

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTCH, V. F.

AUTHOR: Ginsburg, Z. I., Engineer
TITLE: Production Engineering and Technical Session on the Exchange of Experience in the Utilization of Natural Gas in Industrial Furnaces of Polytechnic Plants (Privately-owned Technological Plants) of Ukraine. pp. 67-68. 7 pages.
PUBLISHER: Naukovo-tekhnicheskaya sluzhba po obucheniyu i posobiyam po prirodozashchitnym perekhodam na gazosstroitel'nye rynki zazdach /

PERIODICAL: Vestnik kakhinotekhniki. 1958, no. 1, pp. 66-67 (USSR)

ABSTRACT: The session was called by the Khar'kov soviet of the economic council. The technical working section of the Khar'kov economic council, the metal-bearing section of the polytechnic plants, oblastnoye gospkhosstroiteley, oblastnoye gospkhosstroiteley i politicheskoye i tekhnicheskoye oborudovaniye i perehody v konserviruyushchuyu i polzovatel'skuyu sferu, the Institute of problemnoe issledovaniye i proektirovaniye gaza i gazu, the Institute for gas utilization, the Khar'kov gas and oil industry, and the Institute of constructional services and engineering plants participated.

The author of the article reports on the construction of gas-fired furnaces in the foundry, which have been converted to natural gas. Single-cylinder charges of 30-50 kg/a capacity are used. Single-cylinder suit-and-size burners are used. Single-burner, 400 kg/a, V.P. Corresponding good service in Ukraine is provided by the Institute of constructional services and engineering plants. Variants exist for utilizing natural gas in such furnaces as are described. The construction of furnaces and fire-resistive structures, the production of fire-resistive materials, and the organization of high-temperature Uralloy castings are described. At present the gas reliable non-explosive burning system is the solution of a stamping, A.Y. Yel'yanov, engineer of the Institute of Gas Utilization, reported on the conversion of industrial furnaces produced by natural gas. Existing gasburning equipment can be used. Highly reducing gas-cutting equipment for gas cutting. Very brief - 7 pages.

ZIG & USSR (Institute of Gas Utilization) lectured on drying lines with increased gas utilization when working with oil engineering plants.

卷之三

PHASE I BOOK EXPLOITATION

SOV/4987

Kopytov, V.F.

Bezokislitel'nyy nagrev metalla (Nonoxidizing Heating of Metal) Moscow [VINIKI] 1959.
46 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agencies: Gosudarstvennyy nauchno-tehnicheskiy komitet Soveta ministrov SSSR, Akademiya nauk SSSR, and Vesesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

Ed.: M.K. Morozova; Tech. Ed.: G.A. Shevchenko.

PURPOSE: This booklet is intended for engineers and technicians concerned with the heating of metals.

COVERAGE: Protective atmospheres for preventing the oxidation of heated pieces in flame furnaces are discussed. The instruments for analysis and control of the composition of these atmospheres are indicated and suggestions for selecting suitable atmospheres for steels and nonferrous metals are made. New methods of heating metal in flame furnaces without oxidation are reviewed, and designs of such

Card 1/2

Nonoxidizing Heating of Metal

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000824530001

SOV/4987

furnaces are shown. No personalities are mentioned. There are 21 references:
4 Soviet, 15 English, and 2 German.

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Protective Atmospheres	3
Instruments For Controlling the Atmosphere in Furnaces	11
Regulating the Composition of the Protective Atmosphere	13
Selection of Protective Atmospheres	14
Protective Atmospheres Used For Nonferrous Metals	26
Practices of Cementation With Gases	29
New Methods of Nonoxidizing Heating of Metal in Flame Furnaces	37
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AVAILABLE: Library of Congress

Card 2/2

VK/drk/gmp
4-24-61

Kopytof, V.F.

28(1) PHASE I BOOK EXPLOITATION Sov/2156
 Sovzhechnaniye po kompleksnoy mehanizatsii i avtomatizatsii
 tekhnologicheskikh protsessov. 2nd, 1956.
 Avtomatizatsiya mehanostroyeniya i drugiye protsessy / trudy
 sovzhechnaniya / tom. 14. Donyachayev, Gorbushina, Stal'kov
 (Avtomatika i Machine-Building Processes; Proceedings of the
 Conference on Over-All Mechanization and Automation of Technolo-
 gical Processes, Vol. 1; Hot Metal-Forming) Moscow, 1959. 398 p.
 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mehanostroyeniya.

Komissiya po tekhnologii mehanostroyeniya.

Resp. Ed.: V.I. Dikushin. Academician: Compiler: V.M. Nashatov:
 Ed. of Publishing House: V.A. Kotov; Tech. Ed.: I.P. Kuz'min.

PURPOSE: The book is intended for mechanical engineers and
 metallurgists.

COVERAGE: The transactions of the Second Conference on the Over-All
 Mechanization and Automation of Industrial Processes, held
 September 25-29, 1956, have been published in three volumes. This
 book, Vol. I, contains articles under the General title "Hot
 Working of Metals." The investigations described in the book were
 conducted by the Sections for Automation and Hot Working of Metals,
 under the direction of the following scientists: Vasil'ev, Melikov,
 P.M. Aksanov, D.P. Ivanyov and G.M. Olov'yan; Forman, M. Melikov,
 A.D. Tsvetkov and V.Y. Meshcherin; welding - G.A. Nikulin,
 A.D. Provor and G.A. Maslov. There are 103 references; 142
 Soviet, 34 English, 6 German, and 1 French.

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Mazurov, A.M.	Automation of Industrial Processes in a Forge Shop	148
Tsvetkov, A.D.	The Value of Strainage Force in Steel Ingots	160
Pilipov, V.V.	Technical and Economic Efficiency of Automation of Stamping from Sheet Steel	165
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Sopidov, V.P.	New Methods for Heating with Gas in Automated Production	189
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Fatov, B.M.	Electric Slag Welding of Large Constructions	243
Rumail, M.M. and A.I. Putin	Regularities in Heating Cores during Resistance Butt-Welding	252

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155

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.P.

Research on the use of gas. Visnyk AN URSR 30 no.3:23-29 Mr '59.
(MIRA 12:6)

1.Chlen-korrespondent AN USSR.
(Gas, Natural).

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

AUTHOR: Kopytov, V.P.

SOV/122-59-3-28/42

TITLE: Non-Oxidising Metal Heating Furnaces outside Russia
(Pechi bezokislitel'nogo nagreva metalla za Rubezhom)

PERIODICAL: Vestnik Mashinostroyeniya, 1959,³⁹ Nr 3, pp 79-82 (USSR)

ABSTRACT: A critical review of foreign furnace designs with
examples from Great Britain, Western Germany, U.S.A.,
and Italy.

There are 5 figures and 4 references, including
1 Soviet, 2 English and 1 German.

Card 1/1

KOPYTOV, V.P., otv.red.; KORNEV, K.A., doktor khim.nauk; red.; KLIMENKO, V.Ya.,
kand.geol.-miner.nauk, red.; SHUL'MAN, I.F., red.izd-va;
KADASHEVICH, O.A., tekhn.red.

[Complete utilization of fuel gasses of the Ukraine; natural and
industrial gases of the Ukraine; natural and industrial gases]
Kompleksnoe ispol'zovanie goriuchikh gazov Ukrayny; prirodnye i
promyshlennye gazy. Kiev, Izd-vo Akad.nauk USSR, 1960. 256 p.

(MIRA 13:4)

1. Akademie nauk URSR, Kiyev. Instytut vyuystannia gazu.
2. Chlen-korrespondent AN USSR; Institut ispol'zovaniya gaza AN
USSR (for Kopytov).
3. Institut geologicheskikh nauk AN USSR (for
Klimenko).

(Ukraine--Gas, Natural)
(Ukraine--Gas manufacture and works)

S/709/60/025/001/004/0
D040/D113

AUTHOR: Kopytov, V.F., Professor, Doctor of Technical Sciences

TITLE: Shielding atmospheres for metallurgical furnaces

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Trudy, v. 25, pt. 1. Moscow, 1960. Raschety, konstruirovaniye i ekspluatatsiya nagrevatel'nykh pechey; materialy Vsesoyuznogo soveshchaniya, 231-240.

TEXT: The paper contains general information on the chemical composition, production processes, properties and recommended applications of gases used in heat treatment furnaces for steel. The conventional designations of the listed gases are taken from a book by A.A. Shmykov and B.V. Malyshev (Ref.1: Kontroliruyemye atmosfery [Controlled atmospheres] Mashgiz, 1953). The following gases are described: ПС-06 (PS-06) - 5% CO₂, up to 10% CO, up to 11% H₂, 0.3% CH₄, 0.8% H₂O, the remainder-nitrogen; ПСО-09 (PSO-09) - up to 5% CO, up to 5% H₂, traces of CH₄, 0.013% H₂O, remainder-nitrogen; con - ↴

Card 1/3

S 709/60/025/001/004/006
D040/D113

Shielding atmospheres ...

verted PSO-09 - 2 to 8% H₂, traces of CH₄ up to 0.013% H₂O, remainder - nitrogen; ПСО -09 (PSA-09) - mixture of nitrogen and hydrogen produced from the combustion products of cracked ammonia; АА(ДА) - cracked ammonia, consisting of 75% and 25% nitrogen; electrolytic hydrogen; КГ -H₂O (KG-H₂O) - a strong reducing gas obtained by cracking hydrocarbon gas with steam and containing 50-99% hydrogen; КГ - ВО (KG-VO) - obtained by cracking hydrocarbon gas with air and consisting of 20% CO, 40% H₂ and 40% N₂; argon and helium. The description of gas production processes is illustrated by block-diagrams of gas producer systems. The gases can be used for bright annealing, tempering, carbonizing, carbonitriding, and nitriding of low- and medium-carbon steels, alloy steel, high-speed steel, thin sheet steel, etc. There are 7 figures, 1 table and 9 references: 2 Soviet and 7 non-Soviet. The four most-recent English-language references are: R.R. Swain, Iron and Steel Eng., no. 7, (1957); J.L. Garrison, Iron and Steel Eng., no. 7, (1957); W.H. Holcroft, Metal Progress, v. 72, no. 4 (1957); C.E. Peck, Metal Progress, v. 72, no. 3 (1957).

Card 2/3

KOPYTOV, V.F.

Combustion products of natural gas used for heating construction
works and production shops. Gas.prom. 5 no.9:25-28 S '60.
(MIRA 13:9)
(Gas ad fuel) (Gas burners)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.F.

Gas utilization institute of the Academy of Sciences of the U.S.S.R.
Gaz. prom. 6 no.3:22-25 '61. (MIRA 14:3)
(Ukraine—Gas, Natural)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTOV, Viktor Filimonovich; KAPLAN, V.G., red.; LANOVSKAYA, M.R.,
red. izd-va; ISLENT'YEVA, P.G., tekhn. red.

[New methods of gas heating] Novye metody gazovogo nagreva.
Moskva, Metallurgizdat, 1962. 135 p. (MIRA 15:3)
(Gas heating)

KOPYTOV, Viktor Filimonovich; KACHKIN, V.G., red.; GRIGOR'YEVA, I.S.,
red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Using new gas heating techniques; verbatim report] Primenenie
novykh metodov gazovogo nagreva; stenogramma lektsii. Lenin-
grad, 1962. 36 p. (MIRA 15:8)
(Gas heating—Equipment and supplies)

KOPYTOV, V.F., otv. red.; DAVYDOV, G.M., kand. ekon. nauk, red.; KLIMENKO, V.Ya., kand. geol.-miner. nauk, red.; GOREV, N.A., inzh., red.; GORODETSKIY, V.I., inzh., red.; LYASOVSKIY, N.F., inzh., red.; TUMANOV, A.P., inzh., red.; STUKALOV, K.V., inzh., red.; TITOVA, N.M., red. izd-va; CHUMACHENKO, V.S., red.izd-va; LIBERMAN, T.R., tekhn. red.

[Development of the Ukrainian gas industry] Razvitiye gazovoi promyshlennosti Ukrayny. Kiev, Izd-vo Akad. nauk USSR, 1962. 274 p. (MIRA 15:11)

1. Akademiya nauk URSR, Kiev. Rada po vyvchenniu produktyvnykh syl URSR. 2. Chlen-korrespondent Akademii nauk Ukr. SSR i Institut ispol'zovaniya gaza Akademii nauk Ukr. SSR (for Kopytov). 3. Sovet po izucheniyu proizvoditel'nykh sil Ukr. SSR (for Davydov). 4. Institut geologicheskikh nauk Akademii nauk SSR (for Klimenko). 5. Ukrainskoye otdeleniye Gosudarstvennogo instituta po proyektirovaniyu zavodov iskusstvennogo zhidkogo topliva i gaza. (for Gorodetskiy). 6. Gosudarstvennyy planovyy komitet Soveta Ministrov SSSR (for Gorev, Lyasovskiy).

(Ukraine--Gas, Natural)

KOPYTOV, V.F.

In the Institute of the Study of the Use of Natural Gas of the
Academy of Sciences of the U.S.S.R. Gaz. prom. 7 no. 5: 52-56 '62.
(MIRA 17:11)

SOROKIN, A.I., red.; ALEKSANDROV, A.V., red.; KLIMUSHIN, A.M.,
red.; KOPYTOW, V.F., red.; TREBIN, F.A., red.;
TURKIN, V.S., red.; CHERNYAK, L.M., red.; SOROKIN, A.I.,
red.; ZUBAREVA, Yelena Ivanovna, ved. red.; SOLGANIK,
Grigoriy Yakovlevich, ved. red.; POLOSINA, A.S., tekhn.red.

[Techniques used in the gas industry of foreign countries]
Zarubezhnaia tekhnika gazovoи promyshlennosti; doklady. Mo-
skva, Gostoptekhizdat, 1963. 386 p. (MIRA 17:2)

1. International Gas Congress. 7th, Stockholm. 1961.

KOPYTOV, V.F., doktor tekhn. nauk, otv. red.; VESELOV, V.V., kand. khim. nauk, red.; YERINOV, A.Ye., kand. tekhn. nauk, red.; TISHCHENKO, A.T., kand. tekhn. nauk, red.; DASHEVSKIY, L.N., kand. tekhn. nauk, red.; CHEGLIKOV, A.T., kand. tekhn. nauk, red. SIGAL, I.Ya., kand. tekhn. nauk, red.; SEMENKOVSKAYA, P.T., kand. tekhn. nauk, red.; YEREMENKO, A.S., kand. tekhn. nauk, red.; DYBAN, Ye.P., kand. tekhn. nauk, red.; FEDOROV, V.I., kand. tekhn. nauk, red.; POL'SKIY, N.I., kand. fiz.-mat. nauk, red.

[Transactions of the Second Heat Engineering Conference of Young Research Workers] Trudy vtoroi teplotekhnicheskoi konferentsii molodykh issledovatelei. Kiev, Izd-vo AN USSR, 1963. 278 p. (MIRA 17:6)

1. Teplotekhnicheskaya konferentsiya molodykh issledovateley, 2, 1963. 2. Chlen-korrespondent AN Ukr.SSR (for Kopytov).

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.F.; STEZHENSKIY, A.I.; ZAGOROVSKIY, O.A.

Oxidation of atmospheric nitrogen in gas furnaces. Gaz. prom.
9 no.7:26-29 '64. (MIRA 17:8)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPITOV, V.F.

Work of the Institute for the Utilization of Gas of the
Academy of Sciences of the U.S.S.R. Gaz. prom. 8 no. 9:28-29
(MIRA 17:8)
S '63.

KOPYTOV, V.I., insh.

Forced oscillations in systems with two degrees of freedom
caused by impact against the limiter of a mass. Izv. vys. ucheb.
zav.; gor. zhur. no.8:91-97 '58. (MIRA 12:5)

Tomskiy politekhnicheskiy institut.
(Boring machinery--vibrations)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

ALABUZHEV, P.M.; KOPYTOV, V.I.

Investigating the vibration of a weight hitting a limiting device.
Inv. TPI 106:213-226 '58. (MIRA 11:11)
(Vibration)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTOV, V. I., Cand Tech Sci (diss) -- "Some problems in the theory of emission in shock machines". Tomsk, 1959. 12 pp (Min Higher and Inter Spec Educ RSFSR, Tomsk Order of Labor Red Banner Polytech Inst im S. M. Kirov, Chair of Theoret Mech), 150 copies (KL, No 10, 1960, 130)

SMOKOTIN, G. Ya, starshiy prepodavatel'; KOPTOV, V.I., assistent

Calculating the impact energy in the repeated impact test of
metals. Izv.vys.ucheb.zav.; gor.zhur. no.8:49-54 '59.

(MIRA 13:5)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy
institut imeni S.M.Kirova. Rekomendovana kafedroy teoreticheskoy
mekhaniki Tomskogo politekhnicheskogo instituta.

(Metals--Testing)
(Testing machines)

KOPYTOV, V.I., inzh.

Vibrations in the system elastic coupling-mass-limiter with one degree of freedom, taking force of resistance into consideration.
Izv. vys. ucheb. zav.; gor. zhur. no.9:68-76 '59. (MIRA 14:6)

l. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut imeni S. M. Kirova. Rekomendovana kafedroy teoreticheskoy mekhaniki.

(Vibration)

ALABUZHEV, P. M., prof.; KOPYTOV, V. I., dotsent

Analytical studies of the vibrations of the shell of breaking
and drilling hammers. Izv. vys. ucheb. zav.: gor. zhur. 5
no.8:95-99 '62. (MIRA 15:10)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy
institut imeni S. M. Kirova (for Alabuzhev). 2. Novosibirskiy
elektrotekhnicheskiy institut (for Kopytov). Rekomendovana
kafedroy teoreticheskoy mehaniki Novosibirskogo elektrotekhnicheskogo
instituta.

(Boring machinery) (Vibration)

GORBUNOV, V.F., inzh.; KOPYTOV, V.I., inzh.; VYSOTSKIY, I.F., inzh.

Results of the investigation of a specimen of pneumatic
drill with an elastic handle. Izv. vys. ucheb. zav.;
mashinostr. no.10:54-57 '63. (MIRA 17:3)

1. Tomskiy politekhnicheskiy institut.

L 32941-66 EEC(k)-2/EWT(d)/FSS-2 BC

ACC NR: AP6022062

SOURCE CODE: UR/0146/66/009/003/0100/0103

AUTHOR: Kopytov, V. I.; Studenikin, A. I.46
BORG: Tomsk Polytechnical Institute, Department of Gyroscopic Instruments and Devices
(Tomskiy politekhnicheskij institut, Kafedra girokopicheskikh priborov i ustroystv)

TITLE: Floating vibration gyroscope

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 3, 1966, 100-103

TOPIC TAGS: gyro, gyroscope, gyroscope suspension

ABSTRACT: While recent designs of vibration gyroscopes have many advantages over the conventional gimbaled type, they have an inherent problem in their low level of output signal. The authors describe an improved vibration gyro which can provide an adequate output signal without degrading gyro performance. The design, shown in Figure 1, consists of two resonant tuning fork masses (1,1) resonated at fixed amplitude by electromagnets (3,3) and mounted in a hermetically sealed float (2) which is secured to the gyro outer case (5) by torsion springs (6) with very low spring constants. If we first assume a constant rotational velocity of the gyro platform about the X-axis, the float will eventually assume the same velocity, due to the combined action of the springs and viscous drag of the liquid filler. The amplitude of the fork oscillation varies with float rotational velocity and is sensed by pickup (7). Assuming the more general case where the gyro platform may

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UDC: 528.526.2

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ACC NR: AP6022062

APPROVED FOR RELEASE: 03/13/2001

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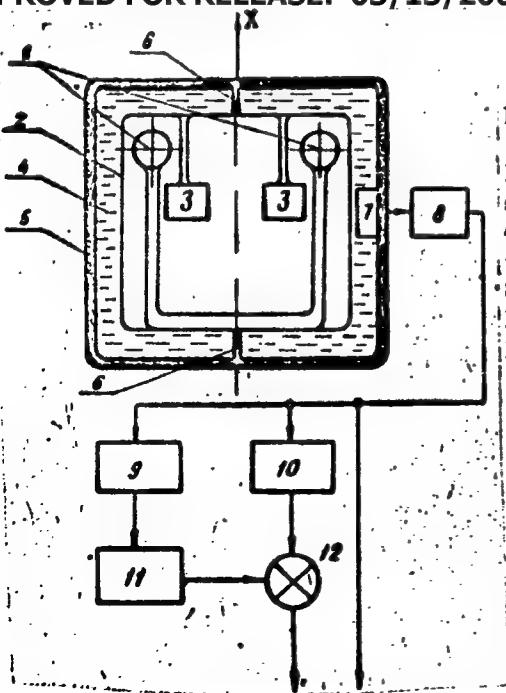


Fig. 1. Vibration gyro

- 1 - Tuning fork masses; 2 - sealed float; 3 - electromagnets;
- 4 - fluid; 5 - outer case; 6 - torsion springs; 7 - pickoff;
- 8 - discriminator; 9 - amplifier;
- 10 - differentiator; 11 - detector;
- 12 - summer.

Card 2/3

L 32941-66

ACC NR: AP6022062

rotate at a varying velocity, a corresponding modulation of the high-frequency sensed signal will appear. The carrier and modulation frequencies are separated in discriminator (8), after which the carrier signal is detected and the modulation signal is differentiated. The resulting signals are proportional respectively to the velocity of the float about the X-axis and the gyro case about the float, hence their sum yields the net platform velocity about the X-axis. From the motion equations for the system the authors show that the pickup sensitivity is a direct function of the applied vibrational frequency, and therefore can be designed to a desired level. This feature is cited as an advantage over the earlier Sperry vibrational gyro. Orig. art. has: 1 figure and 7 formulas. [SH]

SUB CODE: 17/ SUBM DATE: 17Oct65/ OTH REF: 002/ ATD PRESS: 5628

Card

3/3

ACC NR: AP6021453

SOURCE CODE: UR/0413/66/000/011/0077/0078

INVENTOR: Kopytov, V. I.; Studenikin, A. I.

ORG: None

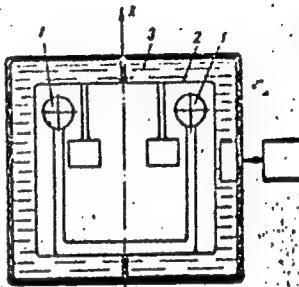
TITLE: A floating vibration gyroscope. Class 42, No. 182345

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 77-78

TOPIC TAGS: gyroscope system, torsional vibration

ABSTRACT: This Author's Certificate introduces a floating vibration gyroscope containing a sensing element which consists of masses oscillating at resonance frequency in phase opposition. These masses are suspended in the housing on elastic torsional supports. The unit also contains a device for signal takeoff. The sensitivity of the gyroscope to the rate of angular motion of the housing is increased by making the sensing element in the form of an airtight float suspended in a liquid with inertial masses inside.

SUB CODE: 17, 13 SUBM DATE: 02Nov64



Card 1/1

UDC: 62-752.4

KOKORIN, A.I.; KOPYTOV, V.M.

On some classes of ordered groups. Alg. i log. 1 no.3c21-23 '62
(MIRA 3:1)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-

Semigroups having subsemigroups with relative complements.
Dokl. AN SSSR 145 no.5:1012-1015 '62. (MIRA 15:8)

1. Ural'skiy gosudarstvennyy universitet im. A.M.Gor'kogo.
Predstavлено академиком A.I.Mal'tsevym.
(Groups, Theory of)

KOPYTOV, V.N., inzhener; MAILOV, L.M., inzhener; SHEVCHENKO, A.G.,
inzhener.

Repairing generator contact rings. Elek.sta. 25 no.10:52-53 0 '54.
(Dynamics) (MIRA 7:11)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOV, V.P., kandidat tekhnicheskikh nauk; SIGAL, I.Ya., inzhener.

Gas burner for room heater. Trudy Inst. isp.gaza AN URSR 1:
40-43 '53. (Gas burners) (MLRA 9:6)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTOV, V.P., kandidat tekhnicheskikh nauk.

Calculating some nonoxidizing processes used in the heat
treatment of steel. Trudy Ins.isp.gaza AN URSR 1:80-98
'53. (Furnaces, Heat-treating) (MLRA 9:6)

SOV/137-57-11-20801

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 23 (USSR)

AUTHOR: Kopytov, V.S.

TITLE: A New Metering Device for Reactants (Novyy dozator reagentov)

PERIODICAL: Obogashcheniye rud, 1956, Nr 5, p 51

ABSTRACT: This device is employed at the Balkhash Copper Smelter. A pump delivers the solution from one tank to another tank located at a higher level. Under the pressure that comes into being because of the difference in levels, the solution from the 2nd tank flows through a calibrated aperture. Excess solution returns to the first tank through a drain line. Utilization of this metering device has made it possible to solve the problem of distribution of the solution to a number of different points.

A.Sh.

Card 1/1

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOKOVIN, I.N.; KOPYTOV, V.S.

Introducing a flowsheet of gravity concentration by stages, Obeg.
rud. 3 no.3:43-44 '58.
(Ore dressing) (MIRA 12:1)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTOV, V.S.; SOLOMENNIKOV, Ye.I.; TUGARINOV, V.K.

Improving crushing department operations in Leninogorsk
Combine plants. Obog.rud. 7 no.1:49-53 '62. (MIRA 15:3)

1. Leninogorskiy kombinat.
(Leninogorsk (East Kazakhstan Province)--Ore dressing)

KOPYTOV, V.S.; SOLOMENNIKOV, Ye.I.; TUGARINOV, V.K.

Improving the operation of crushing and grinding departments in plants
of the Leninogorsk Combine. Obog. rud 7 no.4:51-54 '62. (MIRA 16:4)

1. Leninogorskiy kombinat.

(Leninogorsk (East Kazakhstan Province)--Ore dressing)

L 51509-65 EMT(d)/EMT(I)/EEG(m)/ZWT(m)/EMP(w)/EMP(f)/EMP(v)/EMP/T-2/EMP(k)/EWA(h)/
EWA(e) Po-h/Pq-h/Pf-h/Ps-h/Peb/Fl-h WJ/EM

ACCESSION NR: AP5015320

UR/0286/65/000/009/0076/0076

581 121.46

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54

B

AUTHOR: Bel'kovskaya, T. N.; Byzov, L. N.; Kopytov, V. Ye.

TITLE: A turbine flowmeter. Class 42, No. 170702

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 76

TOPIC TAGS: flowmeter, flow measurement, turbine rotor

ABSTRACT: This Author's Certificate introduces: 1. A turbine flowmeter which consists of a pipe containing the fluid whose flow is to be measured, a rotor which turns at a rate proportional to the volumetric flow, and a trachometer. In order to eliminate bearings in the flow meter, the rotor is located between a swirler and a jet straightener. These devices create the pressure difference which is necessary for balancing the drag of the rotor. 2. A modification of this flow meter in which a jet tube is mounted in the center of the swirler. The rotor acts as a valve with negative feedback with respect to the auxiliary stream created by the jet tube. Thus the forces applied to the rotor are balanced and equilibrium is achieved within a wide range of variations in the flow and physical properties of the

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L 51509-65

ACCESSION NR: AP5015320

fluid which is being inspected.

ASSOCIATION: Leningradskiy ordena krasnogo znameni mekhanicheskiy institut
(Leningrad "Order of the Red Banner" Institute of Mechanical Engineering)

TRANSMITTER: 09 Jan 64

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L 51509-65

ACCESSION NR: AP5015320

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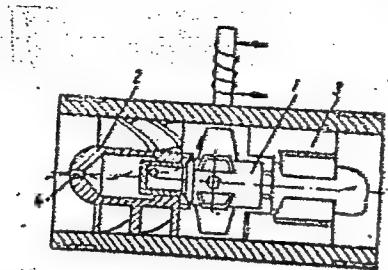


Fig. 1. 1--rotor; 2--swirler; 3--jet straightener; 4--jet tube

AN
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KOPYTOV, Ya.

PA 19T67

USSR/Microphones, Carbon
Microphones - Diaphragms Apr/May 1946

"The Microphone Capsule," Ya. Kopytov, Chief of the Telephone Section of the Bashkir Administration of the Ministry of Communications, USSR, $\frac{1}{2}$ p

"Vestnik Svyazi - Elektro Svyaz'" No 4/5 (73-74)

Dampening of the carbon powder and diaphragm of a microphone capsule are the main reasons for its becoming non-operational. Discusses means adopted by the Bashkir Administration to combat damage by moisture. Capsule type MK-10 has so far given the best service.

19T67

KOMSKIY, D. Prinimali ~~uobchebitie~~; VOLKOV, V.; VOLCHKOV, V.;
GORSHKOV, A. KOPYTOV, Ye.; SALOV, V.; SHORIKOVA, T.;
STOLYAROV, Yu., red.

[Cybernetics made easy] Prostaia kibernetika. Moskva,
Molodaia gvardiia, 1965. 158 p. (MIRA 18:7)

1. Sverdlovskiy gosudarstvennyy pedagogicheskiy institut
(for all except Stolyarov).

85038

S/126/60/010/004/006/023
E201/E491

9,4300 (1137,1138,1143)

AUTHORS:

Samokhvalov, A.A., Fakidov, I.G. and Kopytov, Ye.I.

TITLE:

The Anomaly of Very-High-Frequency Permittivity of
Antiferromagnetic Semiconductors at the Néel Temperature
Fizika metallov i metallovedeniye, 1960, Vol.10, No.4,
pp.538-542

PERIODICAL: A waveguide method was used at 9500 Mc/s to study the
permittivity anomaly of Cr₂O₃ at the Néel temperature of 33 to 37°C.
Cr₂O₃ is an antiferromagnetic semiconductor with very low electrical
conductivity (10^{-9} - 10^{-14} ohm⁻¹ cm⁻¹) at room temperature. Its
forbidden bandwidth depends on many factors and ranges from 0.4 to
0.8 eV; on transition through the Néel point the activation
energy jumps by 0.08 eV. Samples were made from Cr₂O₃ powders of
4MA (ChDA) purity by pressing (5000 kg/cm²) and subsequent firing
at 800 to 900°C. Before measurement the samples were dried by
vacuum heating at 400°C. The circuit used in measurements is
shown in a figure on p.540. A klystron oscillator of 51-II (51-I)
type was used as the source. A standard waveguide line, with an
indicator making it possible to measure the standing-wave minimum to
within 0.01 mm, was employed. The signal was passed to a narrow-

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S/126/60/010/004/006/023
E201/E491

The Anomaly of Very-High-Frequency Permittivity of Antiferromagnetic Semiconductors at the Néel Temperature

band amplifier of 21-~~HM~~ (21-IM) type or to a ~~PPD~~-2 (GPZ-2) galvanometer. Both the amplifier and the klystron oscillator had stabilized power supplies. Permittivity was measured with an additional waveguide section (1 in the figure) insulated from the main waveguide by a thin mica plate. A sample was heated with an oven (2 in the figure) and its temperature was measured with a copper-constantan thermocouple (5). The sample (4) was placed at the short-circuited end of the section 1 or at a quarter-wavelength from the short-circuited end, i.e. in the open-circuit position. Complex permittivity was found from displacement of the standing-wave minimum and from measurements of the standing-wave ratio, deduced from the width of the standing-wave minimum. It was found that on transition to the paramagnetic state the real component of permittivity increased discontinuously by 3 to 4%. This jump may affect markedly the changes of the energy spectrum on destruction of the antiferromagnetic spin order at the Néel temperature. The authors point out that similar permittivity jumps were observed in other antiferromagnetics such as MnS, FeO etc. The authors

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The Anomaly of Very-High-Frequency Permittivity of Antiferromagnetic Semiconductors at the Néel Temperature

measured also the dispersion of permittivity between 100 and 10^8 c/s: permittivity was 16 ± 1 at 100 c/s, decreasing monotonically with frequency and reaching 3.8 ± 0.3 near 10^8 c/s. (The latter was the value obtained at 9500 Mc/s and 20°C.) There are 1 figure and 12 references: 2 Soviet, 6 English, 3 French and 1 translation from English into Russian.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute for Metal Physics, AS USSR)

SUBMITTED: March 9, 1960

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Card 3/3

AYZENBERG, A.I.; KOPYTOV, Yu.A., starshiy nauchnyy sotrudnik; GURULEVA,
N.M., mladshiy nauchnyy sotrudnik

Comparison of frontal frame dogging carriages based on the
time of completing auxiliary operations. Trudy VSNIPIlesdrev
no.9:18-21 '64.
(MIRA 18:11)

AYZENBERG, A.I.; KOPYTOV, Yu.A., starshiy nauchnyy sotrudnik

Stand and field testing of the cable drive of a frontal
frame dogging carriage. Trudy VSNIPILlesdrev no.9:22-26 '64.
(NRA 18:11)

KOPYTOV, Yu. A., inzh.

Strong spherical cabin on the bathyscaphe "Trieste" [from foreign journals]. Sudostroenie 27 no.6:73-74 Je '61 (MIRA 14:6)
(Italy—Bathyscaphe)

S/112/59/000/016/015/054
A052/A002

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 16, p. 104,
34232

AUTHORS: Negovskiy, A., Kopytova, A.

TITLE: Raising the Power of Electric Furnaces for Smelting Electrolytic
Corundum

PERIODICAL: Tekhn.-ekon. byul. Sovnarkhoz Zaporozhsk. ekon. adm. r-na, 1958,
No. 1, pp. 12-15

TEXT: In order to improve the quality of corundum blocks smelted at
Zaporozhskiy abrazivnyy zavod (Zaporozh'ye Abrasives Plant), circuit and design
of the furnace transformer have been modified. The power of the furnace has been
raised from 2,500 kw to 3,800-4,500 kw by reconnecting the transformer winding
from star to delta and by adding an oil-cooling column. These alterations have
secured an increase of the specific surface power at the charge hole from 220 to
300 kw/m². The quality of block melting has improved and the efficiency of
furnaces per hour has increased by 8%. At the same time the yield of the

Card 1/2

KOPYTOVA, E.A.

Spores of the fern Todites Smeiana (P'an) Brick in Upper
Triassic sediments of the Kurayly series in western Kazakhstan.
Trudy VMIGNI no.37:59-61 '63. (MIRA 16:8)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOVA, E.A.

New spore-pollen species from Triassic sediments in western Kazakhstan. Trudy VMIGNI no.37:65-69 '63. (MIRA 16:8)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

KOPYTOVA, E.A.

Stratigraphy and spore-pollen complexes of Triassic sediments in the Ilek basin (Ural Mountain portion of Aktyubinsk Province). Trudy VNIGNI no.37:77-88 '63. (MIRA 16:8)

KIRZON, M.I., KOPYTOVA, F.V.

Effect of sensory stimulations on the "parenterous" afferent
activity recorded in the common nerve trunk in frogs. Biul.
eksp. biol. i med. 60 no.9:10-15 S '65. (MIRA 38:10)

I. Kafedra fiziologii zhivotnykh (zav. - prof. B. A. Fudryashov)
biologo-psichennogo fakul'tata Moskovskogo gosudarstvennogo
universiteta imeni Lomonosova.

BASKAKOVA, G.M.; KOPYTOVA, F.V.

Effect of aminazine on respiration in the frog. Biul. eksp. biol. i med. 56 no.12:20-23 D '62.

(MIRA 17:11)

1. Kafedra fiziologii zhivotnykh (nauchnyy rukovoditel' - prof. M.V. Kirzon) biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

KOPYTOV, V.F., kandidat tekhnicheskikh nauk; KOPYTOVA, G.F., inzhener;
SOROKIN, P.V.

Decarbonizing steel in flame furnaces. Vest.mash. 34 no.3:36-40
Mr '54.
(MLRA 7:4)
(Steel--Metallurgy)



ERIK, M.I. [deceased]; KOFTTOVA, E.A.; TURUTANOVA-KSTOVA, A.I.

Some Mesozoic ferns and their spores of the southwestern Ural Mountain
region. Mat.VSMEI no.9:131-177 '55.
(Ural Mountain region--Ferns, Fossils)

1. KOPYTOVA, S. A.

2. USSR (600)

4. Alga Region - Lignite

7. Report on the exploratory survey and prospecting activities in the region of the
Alga lignite deposits in the Aktyubinsk Province during 1944. Abstract Izv.
Glav.upr.geol.fon. No. 3, 1947.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

APPROVED FOR R

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8

KOPYTOVA, L.A.

Individual style of labor activity of the adjusters as affected
by the strength of excitatory processes of the nervous system.
Vop. psichol. 10 no.1:25-33 Ja-F'64 (MIRA 17:3)

1. Kafedra psichologii Permskogo pedagogicheskogo instituta.

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000824530001-8"

S/689/61/000/000/010/03
D205/D503

18.12.10

AUTHORS: Matveyev, B.I., and Konytova, M.V.

TITLE: Influence of the manganese content, temperature and degree of deformation on the mechanical properties of large profiles of the B95 (V95) alloy

SOURCE: Fridlyander, I.N., V.I. Dobatkin, and Ye.D. Zakharov, eds. Deformiruyemyye alyuminiyevyye splavy; sbornik stately. Moscow, 1961, 76 - 84

TEXT: Differences in the Mn content of V95 alloys induce different mechanical characteristics into profiles made thereof. Thus V95 containing 0.1 % Mn will have a higher strength and plasticity in the transverse direction owing to partial recrystallization after thermal treatment, while alloys with higher Mn contents do not undergo recrystallization at all which results in lower values of strength and plasticity in the transverse direction. V95 alloys containing 0.1, 0.25 0.35 and 0.5 % Mn at a constant Cr content of 0.15 % were chosen for investigation. The ingots were homogenized at 450°C over 24 hours

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Card 2/3

Influence of the manganese content ...

S/639/61/000/000/010/03
D205/D303

Tensile strength and the yield points were independent of the Mn content, temperature and the degree of deformation. There are 4 figures, 4 tables and 4 Soviet-bloc references.

✓ B

Card 3/3

S/137/62/000/005/105/150
A006/A101

AUTHORS: Matveyev, B. I., Kopytova, M. V.

TITLE: The effect of the manganese content, the temperature and degree of deformation upon the mechanical properties of large-size B 95 (V95) sections

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 71 - 72, abstract 51434 (V sb. "Deformiruyemye alumin. splavy", Moscow, Oborongiz, 1961, 76 - 84)

TEXT: Grade V95 alloys containing Mn within 0.1; 0.25; 0.35; 0.5%, and a constant amount of Cr within 0.15%, were investigated. In the extremal direction, σ_b and σ_s change practically little at Mn 0.12 - 0.52%, 440 - 360°C extrusion temperature and 75 - 90% deformation degree. In lengthwise direction δ changes to a higher degree, depending on the Mn content, and the temperature and degree of deformation. An increase of the Mn content from 0.12 to 0.52% entails at all extrusion temperatures a decrease in δ in lengthwise direction. In the transverse direction σ_b and σ_s change little depending on the Mn content. the

Card 1/2

S/123/62/000/012/002/010
A004/A101

18.1000
AUTHORS: Matveyev, B. I., Kopytova, M. V.

TITLE: The effect of the manganese content, temperature and degree of deformation on the mechanical properties of large-size sections from the F 95 (V95) alloy

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 12, 1962, 23, abstract 12A149 (V sb. "Deformiruyemyye alumin. splavy". Moscow, Oborongiz, 1961, 76 - 84)

TEXT: The authors investigate the effect of the Mn-content (0.1 - 0.52% at 0.15 % Cr), temperature (360, 400, 440°C) and degree of deformation (75, 85, 90%) during pressing by the direct and reversed methods on the mechanical properties in the longitudinal and transverse direction of the V95 alloy. ϵ_b and ϵ_s in the transverse and longitudinal direction change only slightly depending on the Mn-content, temperature and degree of deformation during pressing; δ changes considerably in both directions. Increasing Mn from 0.12 to 0.52% reduces δ in the transverse direction by a factor of 2 at a temperature of 440 - 400°C, and at a pressing temperature of 360°C nearly by a factor of 3. An increase in the degree

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